

FILE 'MEDLINE' ENTERED AT 08:01:05 ON 19 NOV 2007

FILE 'CAPLUS' ENTERED AT 08:01:05 ON 19 NOV 2007  
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FILE 'BIOSIS' ENTERED AT 08:01:05 ON 19 NOV 2007  
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=> s reca (3a) covalent? (3a) (oligonucleotide or probe)  
L1 1 RECA (3A) COVALENT? (3A) (OLIGONUCLEOTIDE OR PROBE)

=> d ti

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Direct probing: covalent attachment of probe DNA to double-stranded target DNA

=> d kwic

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN  
IT Enzymes, biological studies  
RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
(gene \*\*\*recA\*\*\* ; direct probing by \*\*\*covalent\*\*\* attachment of \*\*\*probe\*\*\* DNA to double-stranded target DNA without target dissocn.)

=> s reca (3a) covalent? (3a) (oligonucleotide or probe or ssdna)  
L2 5 RECA (3A) COVALENT? (3A) (OLIGONUCLEOTIDE OR PROBE OR SSDNA)

=> dup remove  
ENTER L# LIST OR (END)::2  
;2 IS NOT VALID HERE  
The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> dup remove l2  
PROCESSING COMPLETED FOR L2  
L3 2 DUP REMOVE L2 (3 DUPLICATES REMOVED)

=> d ti 1-2

L3 ANSWER 1 OF 2 MEDLINE on STN DUPLICATE 1  
TI Topological testing of the mechanism of homology search promoted by RecA protein.

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Direct probing: covalent attachment of probe DNA to double-stranded target DNA

=> d kwic 1

L3 ANSWER 1 OF 2 MEDLINE on STN DUPLICATE 1  
AB . . . filament and its relaxed or supercoiled circular duplex DNA targets. However, the formation of synaptic complexes between an invading linear \*\*\*RecA\*\*\* - \*\*\*ssDNA\*\*\* filament and \*\*\*covalently\*\*\* closed circular duplex DNAs is promoted by supercoiling of the duplex DNA. The results imply that a triplex structure formed. . .

=> s reca (3a) covalent? (3a) (oligonucleotide or probe or ssdna or dna)  
L4 7 RECA (3A) COVALENT? (3A) (OLIGONUCLEOTIDE OR PROBE OR SSDNA OR DNA)

=> dup remove l4  
PROCESSING COMPLETED FOR L4  
L5 4 DUP REMOVE L4 (3 DUPLICATES REMOVED)

=> d ti 1-4

L5 ANSWER 1 OF 4 MEDLINE on STN DUPLICATE 1  
TI Topological testing of the mechanism of homology search promoted by RecA protein.

L5 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Direct probing: covalent attachment of probe DNA to double-stranded target DNA

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Sequence-Specific Covalent Modification of DNA by Crosslinking Oligonucleotides. Catalysis by RecA and Implication for the Mechanism of Synaptic Joint Formation

L5 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Formation of covalently closed heteroduplex DNA by the combined action of gyrase and RecA protein

=> d kwic 15 3

L5 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2007 ACS on STN  
IT Enzymes  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(gene \*\*\*recA\*\*\*, sequence-specific \*\*\*covalent\*\*\* modification of \*\*\*DNA\*\*\* by crosslinking oligonucleotides. Catalysis by protein RecA and mechanism of synaptic joint formation)

=> s reca (3a) covalent?

L6 36 RECA (3A) COVALENT?

=> dup remove l6

PROCESSING COMPLETED FOR L6

L7 13 DUP REMOVE L6 (23 DUPLICATES REMOVED)

=> d ti 1-13

L7 ANSWER 1 OF 13 MEDLINE on STN DUPLICATE 1  
TI Topological testing of the mechanism of homology search promoted by RecA protein.

L7 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Direct probing: covalent attachment of probe DNA to double-stranded target DNA

L7 ANSWER 3 OF 13 MEDLINE on STN DUPLICATE 2  
TI Inhibition of \*\*\*RecA\*\*\* -mediated cleavage in \*\*\*covalent\*\*\* dimers of UmuD.

L7 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Sequence-Specific Covalent Modification of DNA by Crosslinking Oligonucleotides. Catalysis by RecA and Implication for the Mechanism of Synaptic Joint Formation

L7 ANSWER 5 OF 13 MEDLINE on STN DUPLICATE 3  
TI The DNA-binding site of the RecA protein. Photochemical cross-linking of Tyr103 to single-stranded DNA.

L7 ANSWER 6 OF 13 MEDLINE on STN DUPLICATE 4  
TI DNA-binding surface of RecA protein photochemical cross-linking of the first DNA binding site on RecA filament.

L7 ANSWER 7 OF 13 MEDLINE on STN DUPLICATE 5  
TI Use of psoralen-modified oligonucleotides to trap three-stranded RecA-DNA complexes and repair of these cross-linked complexes by ABC excinuclease.

L7 ANSWER 8 OF 13 MEDLINE on STN DUPLICATE 6  
TI Nucleotide binding by a 24-residue peptide from the RecA protein of Escherichia coli.

L7 ANSWER 9 OF 13 MEDLINE on STN DUPLICATE 7  
TI Tyrosine 264 in the 'recA protein from Escherichia coli is the site of modification by the photoaffinity label 8-azidoadenosine 5'-triphosphate.

L7 ANSWER 10 OF 13 MEDLINE on STN DUPLICATE 8  
TI Affinity labeling of a tyrosine residue in the ATP binding site of the  
recA protein from Escherichia coli with 5'-p-fluorosulfonylbenzoyladenosin  
e.

L7 ANSWER 11 OF 13 MEDLINE on STN DUPLICATE 9  
TI \*\*\*Covalent\*\*\* modification of the \*\*\*recA\*\*\* protein from  
Escherichia coli with the photoaffinity label 8-azidoadenosine  
5'-triphosphate.

L7 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Formation of covalently closed heteroduplex DNA by the combined action of  
gyrase and RecA protein

L7 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN  
TI DNA and nucleoside triphosphate binding properties of recA protein from  
Escherichia coli

=> d kwic 13

L7 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN  
AB . . . binding is enhanced and stable recA protein.cntdot.DNA.cntdot.ATP  
.gamma.S complexes are formed. Neither the DNA nor the  
[.gamma.-thio]triphosphate cofactor appears to be \*\*\*covalently\*\*\*  
linked to \*\*\*recA\*\*\* protein in these complexes.

=> s (helicase or polymerase or ligase or nuclease or endonuclease) (3a) (covalent? or conjugat?)  
L8 16 (HELICASE OR POLYMERASE OR LIGASE OR NUCLEASE OR ENDONUCLEASE)  
(3A) (COVALENT? OR CONJUGAT?) (3A) (OLIGONUCLEOTIDE OR "PEPTIDE  
NUCLEIC ACID" OR PNA OR DNA OR RNA) (3A) PROBE

=> dup remove 18  
PROCESSING COMPLETED FOR L8  
L9 11 DUP REMOVE L8 (5 DUPLICATES REMOVED)

=> d ti 1-11

L9 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Conjugates of RNA polymerase-binding peptides and FRET-labeled peptide  
nucleic acid probes for the analysis of nascent transcripts in live cells

L9 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
TI A polymerase chain reaction-based ribosomal DNA detection technique using  
a surface plasmon resonance detector for a red tide causing microalga,  
Alexandrium affine

L9 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Peptide nucleic acid probes targeting rRNA sequence and hybridization  
assay for wine spoiling Dekkera/Brettanomyces yeast detection

L9 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Hybridisation assay involving nuclease-probe conjugates and immobilization  
of probe or probe-target complexes

L9 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1  
TI Molecular anatomy of \*\*\*RNA\*\*\* \*\*\*polymerase\*\*\* using protein-  
\*\*\*conjugated\*\*\* metal \*\*\*probes\*\*\* with \*\*\*nuclease\*\*\* and  
protease activities

L9 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Molecular DNA switches and DNA chips

L9 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Direct probing: covalent attachment of probe DNA to double-stranded target  
DNA

L9 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Methods, kit, and adducts for replicative RNA-based amplification  
detection of target nucleic acid sequences

L9 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Use of Altermonas BAL 31 \*\*\*nuclease\*\*\* as \*\*\*probe\*\*\* for  
\*\*\*covalent\*\*\* alterations in duplex \*\*\*DNA\*\*\*

L9 ANSWER 10 OF 11 MEDLINE on STN DUPLICATE 2  
TI \*\*\*Probes\*\*\* of eukaryotic \*\*\*DNA\*\*\* -dependent RNA  
\*\*\*polymerase\*\*\* II-II. \*\*\*Covalent\*\*\* binding of two purine  
nucleoside dialdehydes to the initiation subsite.

L9 ANSWER 11 OF 11 MEDLINE on STN DUPLICATE 3  
TI Conformational transition of Escherichia coli RNA polymerase induced by  
the interaction of sigma subunit with core enzyme.

=> d bib kwic 1, 4

L9 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2006:1225739 CAPLUS <<LOGINID::20071119>>  
DN 146:1566  
TI Conjugates of RNA polymerase-binding peptides and FRET-labeled peptide  
nucleic acid probes for the analysis of nascent transcripts in live cells  
IN Eberwine, James H.; Langel, Uelo; Eiriksdottir, Emelia; Peritz, Tiina;  
Sul, Jai-Yoon; Haydon, Philip G.; Kim, Junhyong  
PA The Trustees of the University of Pennsylvania, USA  
SO PCT Int. Appl., 174pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006125012	A2	20061123	WO 2006-US19107	20060517
	WO 2006125012	A3	20070503		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				

PRAI US 2005-682334P P 20050518  
ST mRNA nascent detection \*\*\*RNA\*\*\* \*\*\*polymerase\*\*\* peptide  
\*\*\*probe\*\*\* \*\*\*conjugate\*\*\*  
IT Peptides, properties  
RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses)  
( \*\*\*RNA\*\*\* \*\*\*polymerase\*\*\* -binding, \*\*\*probe\*\*\*  
\*\*\*conjugates\*\*\* ; \*\*\*conjugates\*\*\* of \*\*\*RNA\*\*\*  
\*\*\*polymerase\*\*\* -binding peptides and FRET-labeled PNA probes for  
anal. of nascent transcripts in live cells)  
IT Peptides, properties  
RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses)  
(conjugates, with \*\*\*peptide\*\*\* \*\*\*nucleic\*\*\* \*\*\*acid\*\*\*  
\*\*\*probes\*\*\* ; \*\*\*conjugates\*\*\* of \*\*\*RNA\*\*\*  
\*\*\*polymerase\*\*\* -binding peptides and FRET-labeled PNA probes for  
anal. of nascent transcripts in live cells)

L9 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2000:260583 CAPLUS <<LOGINID::20071119>>  
DN 132:304258  
TI Hybridisation assay involving nuclease-probe conjugates and immobilization  
of probe or probe-target complexes  
IN Harbron, Stuart  
PA UK  
SO PCT Int. Appl., 46 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000022165	A1	20000420	WO 1999-GB3383	19991012
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,				

MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,  
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,  
AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA	2356613	A1	20000420	CA 1999-2356613	19991012
AU	9962187	A1	20000501	AU 1999-62187	19991012
GB	2346694	A	20000816	GB 1999-24169	19991012
GB	2346694	B	20010124		
EP	1121463	A1	20010808	EP 1999-949210	19991012

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

JP	2002527078	T	20020827	JP 2000-576055	19991012
US	2002090617	A1	20020711	US 2001-833918	20010413

PRAI GB 1998-22067 A 19981012  
WO 1999-GB3383 W 19991012  
US 1999-403105 A2 19991014

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Antibodies

RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
(anti-double-stranded \*\*\*DNA\*\*\* ; hybridization assay involving  
\*\*\*nuclease\*\*\* - \*\*\*probe\*\*\* \*\*\*conjugates\*\*\* and  
immobilization of \*\*\*probe\*\*\* or probe-target complexes)

IT \*\*\*DNA\*\*\*

Nucleic acids  
\*\*\*Peptide\*\*\* \*\*\*nucleic\*\*\* \*\*\*acids\*\*\*  
\*\*\*RNA\*\*\*

RL: ANT (Analyte); ANST (Analytical study)  
(hybridization assay involving \*\*\*nuclease\*\*\* - \*\*\*probe\*\*\*  
\*\*\*conjugates\*\*\* and immobilization of \*\*\*probe\*\*\* or  
probe-target complexes)

IT Antibodies

RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
(monoclonal, anti-double-stranded \*\*\*DNA\*\*\* ; hybridization assay  
involving \*\*\*nuclease\*\*\* - \*\*\*probe\*\*\* \*\*\*conjugates\*\*\* and  
immobilization of \*\*\*probe\*\*\* or probe-target complexes)

=>

\$%^STN;HighlightOn= \*\*\*;HighlightOff=\*\*\* ;

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NEWS 2 JUL 02 LMEDLINE coverage updated  
NEWS 3 JUL 02 SCISEARCH enhanced with complete author names  
NEWS 4 JUL 02 CHEMCATS accession numbers revised  
NEWS 5 JUL 02 CA/CAPLUS enhanced with utility model patents from China  
NEWS 6 JUL 16 CAPLUS enhanced with French and German abstracts  
NEWS 7 JUL 18 CA/CAPLUS patent coverage enhanced  
NEWS 8 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification  
NEWS 9 JUL 30 USGENE now available on STN  
NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags  
NEWS 11 AUG 06 FSTA enhanced with new thesaurus edition  
NEWS 12 AUG 13 CA/CAPLUS enhanced with additional kind codes for granted patents  
NEWS 13 AUG 20 CA/CAPLUS enhanced with CAS indexing in pre-1907 records  
NEWS 14 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB  
NEWS 15 AUG 27 USPATOLD now available on STN  
NEWS 16 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data  
NEWS 17 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index  
NEWS 18 SEP 13 FORIS renamed to SOFIS  
NEWS 19 SEP 13 INPADOCDB enhanced with monthly SDI frequency  
NEWS 20 SEP 17 CA/CAPLUS enhanced with printed CA page images from 1967-1998  
NEWS 21 SEP 17 CAPLUS coverage extended to include traditional medicine patents  
NEWS 22 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements  
NEWS 23 OCT 02 CA/CAPLUS enhanced with pre-1907 records from Chemisches Zentralblatt  
NEWS 24 OCT 19 BEILSTEIN updated with new compounds  
NEWS 25 NOV 15 Derwent Indian patent publication number format enhanced  
NEWS 26 NOV 19 WPIX enhanced with XML display format

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

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NEWS IPC8 For general information regarding STN implementation of IPC 8

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=> file medline caplus embase biosis  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 09:59:10 ON 19 NOV 2007

FILE 'CAPLUS' ENTERED AT 09:59:10 ON 19 NOV 2007  
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```
=> s (fluorescent? (3a) label? (3a) (oligonucleotide or probe))
L1      5309 (FLUORESCENT? (3A) LABEL? (3A) (OLIGONUCLEOTIDE OR PROBE))

=> s l1 (50a) advantag? (20a) (enzym? (3a) (oligonucleotide or probe))
L2      0 L1 (50A) ADVANTAG? (20A) (ENZYM? (3A) (OLIGONUCLEOTIDE OR PROBE))
      )

=> s l1 (50a) advantag? and (enzym? (3a) (oligonucleotide or probe))
L3      0 L1 (50A) ADVANTAG? AND (ENZYM? (3A) (OLIGONUCLEOTIDE OR PROBE))

=> s l1 and (enzym? (5a) (oligonucleotide or probe))
L4      156 L1 AND (ENZYM? (5A) (OLIGONUCLEOTIDE OR PROBE))

=> s l1 and (enzym? (5a) (oligonucleotide or probe) (5a) (label? or conjugat?))
L5      129 L1 AND (ENZYM? (5A) (OLIGONUCLEOTIDE OR PROBE) (5A) (LABEL? OR
      CONJUGAT?))

=> s l5 and advantag?
L6      3 L5 AND ADVANTAG?

=> dup remove l6
PROCESSING COMPLETED FOR L6
L7      3 DUP REMOVE L6 (0 DUPLICATES REMOVED)

=> d kwic 1-3
```

```
L7  ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2007 ACS on STN
AB  . . . erythrocyte lysing soln., RNA extn. reagents, RT reaction soln.,
M-MLV reverse transcriptase, RNase inhibitor, PCR reaction soln.
comprising primers and ***fluorescent*** - ***labeled***
***probe*** , Taq ***enzyme*** , std. sample, and ref. sample, wherein
primers for prostate specific antigen (PSA) with sequences of
5-cagtctgcggcggtgtt-3' and 5'-gcaagatcacgcttttgttct-3', the primers. .
. fluorescent quant. RT-PCR to detect the mRNA expression of PSA and PSMA
by Taq-man probe method. The method has the ***advantages*** of high
sensitivity and specificity; and can avoid the false pos. result happening
in conventional RT-PCR amplification.
```

```
L7  ANSWER 2 OF 3  CAPLUS  COPYRIGHT 2007 ACS on STN
AB  . . . example, fluorescent signal when the labeling dyes are sepd. from
one another. Methods for sepg. the dye include cleaving the
***labeled*** ***oligonucleotides*** include using ***enzymes***
that have 5'-exonuclease activity. In one embodiment nucleic acid primers
of the present invention may fluoresce upon hybridization to a . . . the
present invention have wide applications ranging from general detection of
a target nucleic acid sequence to clin. diagnostics. Major
***advantages*** of the oligonucleotides including nucleic acid probes
and primers of many embodiments of the present invention are their
synthetic simplicity,. . .
IT  Cyanine dyes
***Fluorescent*** dyes
PCR (polymerase chain reaction)
( ***oligonucleotides*** ***labeled*** with multiple spectrally
identical or similar fluorophores for use as primers or probes)
IT  ***Fluorescent*** dyes
(xanthene; ***oligonucleotides*** ***labeled*** with multiple
spectrally identical or similar fluorophores for use as primers or
probes)
```

```
L7  ANSWER 3 OF 3  CAPLUS  COPYRIGHT 2007 ACS on STN
AB  . . . or quantitating the target sequence in the sample. Because the
non-nucleotide probe/target sequence is protected against degrdn., it is
another ***advantage*** of this invention that the sample can be
treated with enzymes which degrade sample components, either before or
```

```

after the.
IT Chemiluminescent substances
  Chromophores
    ***Fluorescent*** substances
  Spin labels
    ( ***probe***      ***labels*** ; methods, kits and compns. for the
      identification of nucleic acids electrostatically bound to matrixes)
IT ***Enzymes*** , uses
  Haptens
  Radionuclides, uses
  RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
    ( ***probe***      ***labels*** ; methods, kits and compns. for the
      identification of nucleic acids electrostatically bound to matrixes)

```

```
=> s l15 and (direct? (2a) detect?)
```

```
L15 NOT FOUND
```

```
The L-number entered could not be found. To see the definition
of L-numbers, enter DISPLAY HISTORY at an arrow prompt (=>).
```

```
=> s l5 and (direct? (2a) detect?)
```

```
L8      0 L5 AND (DIRECT? (2A) DETECT?)
```

```
=> s l5 and (direct?)
```

```
L9      23 L5 AND (DIRECT?)
```

```
=> dup remove l9
```

```
PROCESSING COMPLETED FOR L9
```

```
L10      17 DUP REMOVE L9 (6 DUPLICATES REMOVED)
```

```
=> d kwic 1-2
```

```
L10 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
```

```
AB      . . . . to a labeled polynucleotide from a sample, and a signal generated
from a complex thereof is amplified through labeled antibodies
***directed*** to a receptor for the label. In particular embodiments,
the assay provides information on gene expression.
```

```
IT Chemiluminescent substances
  ***Fluorescent*** dyes
  (for ***probe***      ***labeling*** ; amplification of signal using
    bead-based oligonucleotide assay)
```

```
IT Chemical compounds
  ***Enzymes*** , analysis
  RL: ARU (Analytical role, unclassified); ANST (Analytical study)
  (for ***probe***      ***labeling*** ; amplification of signal using
    bead-based oligonucleotide assay)
```

```
L10 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2007 ACS on STN
```

```
IT ***Fluorescent*** dyes
  ( ***probe***      ***labeled*** with; diagnostic for long term
    response of HBV carrier to 3TC therapy by detg. the mutations in HBV
    polymerase region)
```

```
IT Antibodies and Immunoglobulins
  ***Enzymes*** , biological studies
```

```
Haptens
```

```
Proteins
```

```
Radionuclides, biological studies
```

```
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST
  (Analytical study); BIOL (Biological study); USES (Uses)
```

```
( ***probe***      ***labeled*** with; diagnostic for long term
  response of HBV carrier to 3TC therapy by detg. the mutations in HBV
  polymerase region)
```

```
IT Mutagenesis
  (site- ***directed*** , substitution, of DNA precore/core promoter,
  open reading frame region; diagnostic for long term response of HBV
  carrier to 3TC therapy by detg. the mutations in HBV polymerase region)
```

```
=> s l9 and detect?
```

```
L11      14 L9 AND DETECT?
```

```
=> dup remove l11
```

```
PROCESSING COMPLETED FOR L11
```

```
L12      8 DUP REMOVE L11 (6 DUPLICATES REMOVED)
```

```
=> d ti, bib, kwic 1-8 l12
```



L12 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Diagnostic for long term response of HBV carrier to 3TC therapy by  
 determining the mutations in HBV polymerase region  
 AN 2004:311076 CAPLUS <<LOGINID::20071119>>  
 DN 140:332459  
 TI Diagnostic for long term response of HBV carrier to 3TC therapy by  
 determining the mutations in HBV polymerase region  
 IN Korba, Brent E.; Ciancio, Alessia; Gerin, John L.  
 PA Georgetown University, USA  
 SO PCT Int. Appl., 107 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004031729	A2	20040415	WO 2003-US31121	20031001
	WO 2004031729	A3	20040715		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003277208	A1	20040423	AU 2003-277208	20031001
	US 2005053916	A1	20050310	US 2003-677920	20031001
PRAI	US 2002-415301P	P	20021001		
	WO 2003-US31121	W	20031001		
IT	Chemicals				
	(biochems., for ***detecting*** labeled HBV; diagnostic for long term response of HBV carrier to 3TC therapy by detg. the mutations in HBV polymerase region)				
IT	Dot blot hybridization				
	Immunoassay				
	Radiochemical analysis				
	Spectroscopy				
	(for ***detecting*** labeled HBV; diagnostic for long term response of HBV carrier to 3TC therapy by detg. the mutations in HBV polymerase region)				
IT	Catalysis				
	(photochem., for ***detecting*** labeled HBV; diagnostic for long term response of HBV carrier to 3TC therapy by detg. the mutations in HBV polymerase region)				
IT	***Fluorescent*** dyes				
	( ***probe*** ***labeled*** with; diagnostic for long term response of HBV carrier to 3TC therapy by detg. the mutations in HBV polymerase region)				
IT	Antibodies and Immunoglobulins				
	***Enzymes*** , biological studies				
	Haptens				
	Proteins				
	Radionuclides, biological studies				
	RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)				
	( ***probe*** ***labeled*** with; diagnostic for long term response of HBV carrier to 3TC therapy by detg. the mutations in HBV polymerase region)				
IT	Mutagenesis				
	(site- ***directed*** , substitution, of DNA precore/core promoter, open reading frame region; diagnostic for long term response of HBV carrier to 3TC therapy by detg. the mutations in HBV polymerase region)				

L12 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN  
 TI Hybridization assays using target enhanced signal amplification for  
 \*\*\*detection\*\*\* of Mycobacterium tuberculosis  
 AN 2003:930834 CAPLUS <<LOGINID::20071119>>  
 DN 140:1537  
 TI Hybridization assays using target enhanced signal amplification for  
 \*\*\*detection\*\*\* of Mycobacterium tuberculosis  
 IN Dattagupta, Nanibhushan  
 PA USA  
 SO U.S. Pat. Appl. Publ., 16 pp.  
 CODEN: USXXCO

DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2003219755	A1	20031127	US 2002-155666	20020524
PRAI	US 2002-155666		20020524		
TI	Hybridization assays using target enhanced signal amplification for ***detection*** of Mycobacterium tuberculosis				
AB	This invention relates to methods of signal amplification in nucleic acid hybridization reactions without the use of ***direct*** amplification of the target sequence. More particularly, it relates to methods of ***detecting*** target nucleic acids in samples such that ***detection*** is accomplished via probe-target and target-target hybridization. In one aspect, the present invention relates to methods of ***detecting*** genomic target nucleic acids such that the signal is amplified via formation of target-probe complexes. The expt. demonstrated that the. . . mols. assocd. with each probe mol. can be enhanced, which in turn provides a platform for enhancing signal using a ***detectable*** probe that binds to the target nucleic acids in the complex. The probes used for nucleic acid hybridization are immobilized to solid support in biochip. The invention provides probe sequence for ***detection*** of gene IS6110 of Mycobacterium tuberculosis.				
ST	hybridization target enhanced signal amplification; Mycobacterium ***detection*** probe microarray				
IT	Gene, microbial RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (IS6110, ***detection*** of; hybridization assays using target enhanced signal amplification for ***detection*** of Mycobacterium tuberculosis)				
IT	Lung (aspirate, samples from; hybridization assays using target enhanced signal amplification for ***detection*** of Mycobacterium tuberculosis)				
IT	Bacillus anthracis Human immunodeficiency virus ( ***detection*** of; hybridization assays using target enhanced signal amplification for ***detection*** of Mycobacterium tuberculosis)				
IT	Test kits (diagnostic; hybridization assays using target enhanced signal amplification for ***detection*** of Mycobacterium tuberculosis)				
IT	Urethra Vagina (discharge, samples from; hybridization assays using target enhanced signal amplification for ***detection*** of Mycobacterium tuberculosis)				
IT	Nucleic acids RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (from bacterial or viral infectious agent., ***detection*** of; hybridization assays using target enhanced signal amplification for ***detection*** of Mycobacterium tuberculosis)				
IT	Blood analysis DNA microarray technology Microarray technology Mycobacterium tuberculosis Nucleic acid hybridization Urine analysis (hybridization assays using target enhanced signal amplification for ***detection*** of Mycobacterium tuberculosis)				
IT	Probes (nucleic acid) RL: ARG (Analytical reagent use); DGN (Diagnostic use); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses) (hybridization assays using target enhanced signal amplification for ***detection*** of Mycobacterium tuberculosis)				
IT	Oligonucleotides RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (immobilized, on silicon, plastic, ceramic, rubber, or polymer surface; hybridization assays using target enhanced signal amplification for ***detection*** of Mycobacterium tuberculosis)				
IT	Fluorescence resonance energy transfer (label; hybridization assays using target enhanced signal amplification for ***detection*** of Mycobacterium tuberculosis)				
IT	***Oligonucleotides***				

RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 ( \*\*\*labeled\*\*\* , chem., \*\*\*enzymic\*\*\* ; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT Diagnosis  
 (mol.; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT Immobilization, molecular or cellular  
 (of probe to solid support; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT Cytolysis  
 (of samples; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT Furocoumarins  
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (probe chem. labeled with; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT Ceramics  
 (probe immobilized to; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT Glass, uses  
 Plastics, uses  
 Polymers, uses  
 Rubber, uses  
 RL: DEV (Device component use); USES (Uses)  
 (probe immobilized to; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT Chromophores  
 . \*\*\*Fluorescent\*\*\* substances  
 Luminescent substances  
 ( \*\*\*probe\*\*\* \*\*\*labeled\*\*\* with; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT Isotopes  
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (probe labeled with; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT Body fluid  
 (pus, samples from; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT Human  
 (samples for \*\*\*detection\*\*\* isolated from; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT Amniotic fluid  
 Cerebrospinal fluid  
 Feces  
 Saliva  
 Semen  
 Sputum  
 Tear (ocular fluid)  
 (samples from; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT 64358-50-5, 4'-Aminomethyl-trioxsalen 67620-23-9, Ethidium diazide  
 67823-52-3, 2-Azidofluorene 69063-03-2, 4-Azido-7-chloroquinoline  
 80500-62-5, 4'-Aminomethyl-4,5'-dimethylangelicin 626233-98-5D, mono- and bis-aminoalkyl derivs. 626233-99-6D, mono- and bis-aminoalkyl derivs. 626234-00-2 626234-01-3 626234-02-4 626234-03-5  
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (as intercalator compd. bound to probe; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT 260-94-6, Acridine  
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (dye, probe chem. labeled with; hybridization assays using target enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT 58880-05-0, Ethidium monoazide

RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (ethidium monoazide, as intercalator compd. bound to probe;  
 hybridization assays using target enhanced signal amplification for  
 \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT 139784-50-2, GenBank X17348 200668-87-7, GenBank Y15740  
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL  
 (Biological study)  
 (hybridization assays using target enhanced signal amplification for  
 \*\*\*detection\*\*\* of Mycobacterium tuberculosis)

IT 627561-88-0 627561-89-1 627561-90-4  
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); PRP (Properties);  
 ANST (Analytical study); BIOL (Biological study); USES (Uses)  
 (oligonucleotide probe sequence; hybridization assays using target  
 enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium  
 tuberculosis)

IT 91-22-5, Quinoline, biological studies 92-82-0, Phenazine 92-84-2,  
 Phenothiazine 229-87-8, Phenanthridine  
 RL: ARG (Analytical reagent use); DGN (Diagnostic use); ANST (Analytical  
 study); BIOL (Biological study); USES (Uses)  
 (probe chem. labeled with; hybridization assays using target enhanced  
 signal amplification for \*\*\*detection\*\*\* of Mycobacterium  
 tuberculosis)

IT 7440-21-3, Silicon, uses  
 RL: DEV (Device component use); USES (Uses)  
 (probe immobilized to; hybridization assays using target enhanced  
 signal amplification for \*\*\*detection\*\*\* of Mycobacterium  
 tuberculosis)

IT 627567-49-1  
 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; hybridization assays using target  
 enhanced signal amplification for \*\*\*detection\*\*\* of Mycobacterium  
 tuberculosis)

L12 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1  
 TI Bioinformatic identification, cloning, sequences and biocatalytic use of  
 microbial thermostable phosphatases and design of new thermostable  
 phosphatases  
 AN 2003:34374 CAPLUS <<LOGINID::20071119>>  
 Correction of: 2002:850246  
 DN 138:51927  
 Correction of: 137:348420  
 TI Bioinformatic identification, cloning, sequences and biocatalytic use of  
 microbial thermostable phosphatases and design of new thermostable  
 phosphatases  
 IN Short, Jay M.; Mathur, Eric J.; Lee, Edd; Bylina, Edward  
 PA USA  
 SO U.S. Pat. Appl. Publ., 47 pp., Cont.-in-part of U.S. Ser. No. 202,681.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002164751	A1	20021107	US 2001-902525	20010709
	WO 9748416	A1	19971224	WO 1997-US10784	19970619
	W: AU, CA, JP, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP	1488802	A2	20041222	EP 2004-20554	19970619
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
WO	2003006610	A2	20030123	WO 2002-US21693	20020709
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002324477	A1	20030129	AU 2002-324477	20020709
	US 2005186605	A1	20050825	US 2005-47257	20050131
PRAI	US 1996-33752P	P	19960619		
	WO 1997-US10784	W	19970619		
	US 1999-202681	A2	19991223		

EP 1997-933154 A3 19970619  
US 2001-902525 A2 20010709  
WO 2002-US21693 W 20020709

IT Genetic polymorphism  
(bioinformatic \*\*\*detection\*\*\* of; bioinformatic identification,  
cloning, sequences and biocatalytic use of microbial thermostable  
phosphatases and design of new thermostable phosphatases)

IT Probes (nucleic acid)  
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST  
(Analytical study); BIOL (Biological study); USES (Uses)  
(for \*\*\*detection\*\*\* of thermostable phosphatase gene;  
bioinformatic identification, cloning, sequences and biocatalytic use  
of microbial thermostable phosphatases and design of new thermostable  
phosphatases)

IT Chemiluminescent substances  
\*\*\*Fluorescent\*\*\* indicators  
Isotope indicators  
( \*\*\*oligonucleotide\*\*\* \*\*\*probe\*\*\* \*\*\*labeled\*\*\* by;  
bioinformatic identification, cloning, sequences and biocatalytic use  
of microbial thermostable phosphatases and design of new thermostable  
phosphatases)

IT \*\*\*Enzymes\*\*\* , uses  
Haptens  
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
( \*\*\*oligonucleotide\*\*\* \*\*\*probe\*\*\* \*\*\*labeled\*\*\* by;  
bioinformatic identification, cloning, sequences and biocatalytic use  
of microbial thermostable phosphatases and design of new thermostable  
phosphatases)

IT Mutagenesis  
(site- \*\*\*directed\*\*\* , protein engineering using; bioinformatic  
identification, cloning, sequences and biocatalytic use of microbial  
thermostable phosphatases and design of new thermostable phosphatases)

L12 ANSWER 4 OF 8 MEDLINE on STN DUPLICATE 2  
TI \*\*\*Detection\*\*\* of minute virus of mice using real time quantitative  
PCR in assessment of virus clearance during the purification of Mammalian  
cell substrate derived biotherapeutics.  
AN 2002661591 MEDLINE <<LOGINID::20071119>>  
DN PubMed ID: 12421584  
TI \*\*\*Detection\*\*\* of minute virus of mice using real time quantitative  
PCR in assessment of virus clearance during the purification of Mammalian  
cell substrate derived biotherapeutics.  
AU Zhan Dejin; Roy Margaret R; Valera Christine; Cardenas Jesse; Vennari  
Joann C; Chen Janice W; Liu Shengjiang  
CS Virology R&D Laboratory, Department of Cell Culture and Fermentation R&D,  
Genentech Inc., 1 DNA Way, South San Francisco, CA 94080, USA.  
SO Biologicals : Journal of the International Association of Biological  
Standardization, (2002 Dec) Vol. 30, No. 4, pp. 259-70.  
Journal code: 9004494. ISSN: 1045-1056.  
CY England: United Kingdom  
DT (COMPARATIVE STUDY)  
Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 200306  
ED Entered STN: 8 Nov 2002  
Last Updated on STN: 14 Jun 2003  
Entered Medline: 13 Jun 2003  
TI \*\*\*Detection\*\*\* of minute virus of mice using real time quantitative  
PCR in assessment of virus clearance during the purification of Mammalian.  
AB A real time quantitative PCR assay has been developed for  
\*\*\*detecting\*\*\* minute virus of mice (MVM). This assay \*\*\*directly\*\*\*  
quantifies PCR product by monitoring the increase of fluorescence  
intensity emitted during \*\*\*enzymatic\*\*\* hydrolysis of an  
\*\*\*oligonucleotide\*\*\* \*\*\*probe\*\*\* \*\*\*labelled\*\*\* covalently with  
\*\*\*fluorescent\*\*\* reporting and quenching dyes via Taq polymerase  
5'-->3' exonuclease activity. The quantity of MVM DNA molecules in the  
samples was. . . have demonstrated that MVM TaqMan PCR assay is  
approximately 1000-fold more sensitive than the microplate infectivity  
assay with the lowest \*\*\*detection\*\*\* limit of approximately one  
particle per reaction. The reliable \*\*\*detection\*\*\* range is within  
100 to 10(9) molecules per reaction with high reproducibility. The intra  
assay variation is <2.5%, and the. . .

L12 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN  
TI \*\*\*Oligonucleotide\*\*\* \*\*\*probes\*\*\* bearing quenchable

\*\*\*fluorescent\*\*\*      \*\*\*labels\*\*\* , and methods of use in hybridization studies  
 AN 1999:189229 CAPLUS <<LOGINID::20071119>>  
 DN 130:219113  
 TI \*\*\*Oligonucleotide\*\*\*      \*\*\*probes\*\*\* bearing quenchable  
     \*\*\*fluorescent\*\*\*      \*\*\*labels\*\*\* , and methods of use in hybridization studies  
 IN Horn, Thomas; Schroeder, Hartmut R.; Warner, Brian D.; Fiss, Ellen; Sells, Todd; Law, Say-Jong  
 PA Chiron Diagnostics Corporation, USA  
 SO PCT Int. Appl., 68 pp.  
     CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9911813	A2	19990311	WO 1998-US18397	19980903
	WO 9911813	A3	19990506		
	W: AU, CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9892204	A	19990322	AU 1998-92204	19980903
	EP 1009852	A2	20000621	EP 1998-944737	19980903
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	US 2001009760	A1	20010726	US 1998-146157	19980903
	US 6465175	B2	20021015		
	JP 2001514859	T	20010918	JP 2000-508820	19980903
PRAI	US 1997-57810P	P	19970904		
	WO 1998-US18397	W	19980903		
OS	MARPAT 130:219113				
TI	***Oligonucleotide***      ***probes*** bearing quenchable ***fluorescent***      ***labels*** , and methods of use in hybridization studies				
AB	. . . that occurs when a quenchable dye-labeled oligomer forms a hybrid complex. In addn., a method is provided for enhancing the ***detectable*** signal emitted from an amplification multimer hybridized to an oligomer probe to which a quenchable dye has been conjugated through. . . hybrid complex formation. Novel oligonucleotide probes are also provided that comprise an oligomer to which a quenchable dye has been ***directly*** or indirectly linked.				
IT	DNA RL: ARU (Analytical role, unclassified); BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process); USES (Uses) (branched; ***oligonucleotide***      ***probes*** bearing quenchable ***fluorescent***      ***labels*** , and methods of use in hybridization studies)				
IT	Cytometry (flow; ***oligonucleotide***      ***probes*** bearing quenchable ***fluorescent***      ***labels*** , and methods of use in hybridization studies)				
IT	Nucleic acid hybridization (in situ, fluorescence; ***oligonucleotide***      ***probes*** bearing quenchable ***fluorescent***      ***labels*** , and methods of use in hybridization studies)				
IT	Fluorescence quenching Fluorescent dyes Fluorescent substances Genetic mapping Human immunodeficiency virus Nucleic acid hybridization PCR (polymerase chain reaction) ( ***oligonucleotide***      ***probes*** bearing quenchable ***fluorescent***      ***labels*** , and methods of use in hybridization studies)				
IT	DNA Gene Nucleic acids RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process) ( ***oligonucleotide***      ***probes*** bearing quenchable ***fluorescent***      ***labels*** , and methods of use in hybridization studies)				
IT	Mutation				

(point; \*\*\*oligonucleotide\*\*\* \*\*\*probes\*\*\* bearing quenchable  
 \*\*\*fluorescent\*\*\* \*\*\*labels\*\*\* , and methods of use in  
 hybridization studies)

IT Oligonucleotides  
 RL: ARU (Analytical role, unclassified); BPR (Biological process); BSU  
 (Biological study, unclassified); ANST (Analytical study); BIOL  
 (Biological study); PROC (Process)  
 (probe, quenchable dye; \*\*\*oligonucleotide\*\*\* \*\*\*probes\*\*\*  
 bearing quenchable \*\*\*fluorescent\*\*\* \*\*\*labels\*\*\* , and methods  
 of use in hybridization studies)

IT Probes (nucleic acid)  
 RL: ARU (Analytical role, unclassified); BPR (Biological process); BSU  
 (Biological study, unclassified); ANST (Analytical study); BIOL  
 (Biological study); PROC (Process)  
 (quenchable dye; \*\*\*oligonucleotide\*\*\* \*\*\*probes\*\*\* bearing  
 quenchable \*\*\*fluorescent\*\*\* \*\*\*labels\*\*\* , and methods of use  
 in hybridization studies)

IT 165599-63-3, BODIPY-FL  
 RL: ARU (Analytical role, unclassified); BUU (Biological use,  
 unclassified); ANST (Analytical study); BIOL (Biological study); USES  
 (Uses)  
 (BODIPY FL; . \*\*\*oligonucleotide\*\*\* \*\*\*probes\*\*\* bearing  
 quenchable \*\*\*fluorescent\*\*\* \*\*\*labels\*\*\* , and methods of use  
 in hybridization studies)

IT 9012-90-2, DNA polymerase  
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological  
 process); BSU (Biological study, unclassified); BUU (Biological use,  
 unclassified); BIOL (Biological study); PROC (Process); USES (Uses)  
 (Taq; \*\*\*oligonucleotide\*\*\* \*\*\*probes\*\*\* bearing quenchable  
 \*\*\*fluorescent\*\*\* \*\*\*labels\*\*\* , and methods of use in  
 hybridization studies)

IT 9075-08-5, Restriction \*\*\*enzyme\*\*\*  
 RL: ARU (Analytical role, unclassified); BAC (Biological activity or  
 effector, except adverse); BPR (Biological process); BSU (Biological  
 study, unclassified); ANST (Analytical study); BIOL (Biological study);  
 PROC (Process)  
 ( \*\*\*oligonucleotide\*\*\* \*\*\*probes\*\*\* bearing quenchable  
 \*\*\*fluorescent\*\*\* \*\*\*labels\*\*\* , and methods of use in  
 hybridization studies)

IT 221072-57-7 221074-26-6 221111-61-1  
 RL: ARU (Analytical role, unclassified); BPR (Biological process); BSU  
 (Biological study, unclassified); ANST (Analytical study); BIOL  
 (Biological study); PROC (Process)  
 ( \*\*\*oligonucleotide\*\*\* \*\*\*probes\*\*\* bearing quenchable  
 \*\*\*fluorescent\*\*\* \*\*\*labels\*\*\* , and methods of use in  
 hybridization studies)

IT 138026-71-8D, Dipyrrometheneboron difluoride, derivs. 221052-46-6  
 221052-47-7  
 RL: ARU (Analytical role, unclassified); BUU (Biological use,  
 unclassified); ANST (Analytical study); BIOL (Biological study); USES  
 (Uses)  
 ( \*\*\*oligonucleotide\*\*\* \*\*\*probes\*\*\* bearing quenchable  
 \*\*\*fluorescent\*\*\* \*\*\*labels\*\*\* , and methods of use in  
 hybridization studies)

L12 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 3

TI \*\*\*Detection\*\*\* of microbial cells in aerosols using nucleic acid  
 probes

AN 1995:724407 CAPLUS <<LOGINID::20071119>>

DN 123:189433

TI \*\*\*Detection\*\*\* of microbial cells in aerosols using nucleic acid  
 probes

AU Neef, Alexander; Amann, Rudolf; Schleifer, Karl-Heinz

CS Technische Universitaet Muenchen, Munich, D-80290, Germany

SO Systematic and Applied Microbiology (1995), 18(1), 113-22  
 CODEN: SAMIDF; ISSN: 0723-2020

DT Journal

LA English

TI \*\*\*Detection\*\*\* of microbial cells in aerosols using nucleic acid  
 probes

AB . . . methods were evaluated for the identification of microorganisms  
 in mixed bioaerosols. A cultivation-dependent method, colony  
 hybridization, was compared to a \*\*\*direct\*\*\* , cultivation-independent  
 approach, whole cell hybridization with \*\*\*fluorescently\*\*\*  
 \*\*\*labeled\*\*\* \*\*\*oligonucleotides\*\*\* . After sampling of the  
 aerosols by filtration, special processing of filters (cells) preceded  
 hybridization with \*\*\*fluorescently\*\*\* , digoxigenin- or \*\*\*enzyme\*\*\*

- \*\*\*labeled\*\*\*      \*\*\*oligonucleotide\*\*\*      \*\*\*probes\*\*\*      . Group, genus, or species affiliation of collected cells was analyzed with rRNA-targeted probes. Using nucleic acid probes      \*\*\*directed\*\*\* against the multiple cloning site, plasmid bearing Escherichia coli colonies could be differentiated from wild-type colonies. The microbial compn. of. . . monitoring of aerosols generated by std. microbiol. lab. procedures, low concns. of airborne Escherichia coli cells (1-450 m-3) could be      \*\*\*detected\*\*\* . Compared to conventional air monitoring techniques, hybridization with nucleic acid probes should allow more rapid and reliable      \*\*\*detection\*\*\* of airborne microorganisms including genetic engineered microorganisms.

ST microorganism      \*\*\*detection\*\*\* aerosol hybridization

IT Microorganism  
     (      \*\*\*detection\*\*\* of microbial cells in aerosols using nucleic acid probes)

IT Nucleic acid hybridization  
     (DNA-DNA,      \*\*\*detection\*\*\* of microbial cells in aerosols using nucleic acid probes)

IT Aerosols  
     (airborne, biol.,      \*\*\*detection\*\*\* of microbial cells in aerosols using nucleic acid probes)

IT Nucleotides, biological studies  
 RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)  
     (oligo-,      \*\*\*detection\*\*\* of microbial cells in aerosols using nucleic acid probes)

L12 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

TI Rapid identification and in situ      \*\*\*detection\*\*\* of microorganisms using fluorescent rRNA-targeted oligonucleotides

AN 1995:188383 CAPLUS <<LOGINID::20071119>>

DN 122:24645

TI Rapid identification and in situ      \*\*\*detection\*\*\* of microorganisms using fluorescent rRNA-targeted oligonucleotides

AU Amann, R.; Zarda, B.; Trebesius, K. H.; Ludwig, W.; Schleifer, K. H.

CS Technische Universitaet Muenchen, Munich, 80290, Germany

SO Rapid Methods Autom. Microbiol. Immunol., [Int. Congr.], 7th (1994), Meeting Date 1993, 237-44. Editor(s): Spencer, R. C.; Wright, E. P.; Newsam, S. W. B. Publisher: Intercept, Andover, UK.  
 CODEN: 60TMA5

DT Conference; General Review

LA English

TI Rapid identification and in situ      \*\*\*detection\*\*\* of microorganisms using fluorescent rRNA-targeted oligonucleotides

AB A review with 23 refs. Often culture-dependent identification methods are time consuming and fail to      \*\*\*detect\*\*\* the majority of microorganisms present in a sample due to the selectivity of media. Large 16 S and 23 S rRNA data bases allow the      \*\*\*directed\*\*\* design of species- and group-specific oligonucleotide probes. Fixed whole microbial cells can be identified      \*\*\*directly\*\*\* in mixed samples by in situ hybridization with      \*\*\*fluorescent\*\*\*      \*\*\*labeled\*\*\*      \*\*\*probes\*\*\* . A combination of PCR-assisted sequence retrieval and fluorescent oligonucleotide probing has been used successfully to analyze rRNA sequences of hitherto. . . originate from low cellular ribosome contents of target organisms and from background fluorescence of the samples. Hybridization with digoxigenin- or      \*\*\*enzyme\*\*\* -      \*\*\*labeled\*\*\*      \*\*\*oligonucleotide\*\*\*      \*\*\*probes\*\*\* or with multiple      \*\*\*labeled\*\*\* polynucleotide probes may circumvent these problems in the future.

ST review microorganism      \*\*\*detection\*\*\* identification hybridization; fluorescent rRNA oligonucleotide microorganism      \*\*\*detection\*\*\* review

IT Microorganism  
     Nucleic acid hybridization  
     (rapid identification and in situ      \*\*\*detection\*\*\* of microorganisms using fluorescent rRNA-targeted oligonucleotides)

IT Ribonucleic acids, ribosomal  
 RL: ARU (Analytical role, unclassified); ANST (Analytical study)  
     (rapid identification and in situ      \*\*\*detection\*\*\* of microorganisms using fluorescent rRNA-targeted oligonucleotides)

IT Nucleotides, uses  
 RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
     (oligo-, rapid identification and in situ      \*\*\*detection\*\*\* of microorganisms using fluorescent rRNA-targeted oligonucleotides)

L12 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN

TI In situ      \*\*\*detection\*\*\* of viral nucleic acids using fluorescent probes



AN 1991:488561 CAPLUS <<LOGINID::20071119>>  
 DN 115:88561  
 TI In situ \*\*\*detection\*\*\* of viral nucleic acids using fluorescent probes  
 AU Donovan, Richard M.  
 CS Div. Infect. Immunol. Dis., Univ. California, Davis, CA, 95616, USA  
 SO Proceedings of SPIE-The International Society for Optical Engineering (1990), 1206(New Technol. Cytom. Mol. Biol.), 2-6  
 CODEN: PSISDG; ISSN: 0277-786X  
 DT Journal  
 LA English  
 TI In situ \*\*\*detection\*\*\* of viral nucleic acids using fluorescent probes  
 AB . . . objective of this work was to develop and improve technols. in cytometry and mol. biol. for the specific in situ \*\*\*detection\*\*\* of viral nucleic acids. The major application for this system was the \*\*\*detection\*\*\* and measurement of individual cells stained specifically for the human immunodeficiency virus (HIV) in patients with AIDS. Staining procedures used nucleic acid either \*\*\*directly\*\*\* or indirectly \*\*\*labeled\*\*\* with \*\*\*enzymes\*\*\* or \*\*\*fluorescent\*\*\* \*\*\*probes\*\*\*. A cytometry system was used to acquire digitized images of labeled cells and det. their individual staining d. or intensity..  
 IT Nucleic acids  
 RL: ANT (Analyte); ANST (Analytical study)  
 ( \*\*\*detection\*\*\* of, of human immunodeficiency virus, by cytometry, AIDS in relation to)  
 IT Immunodeficiency  
 (acquired immune deficiency syndrome, \*\*\*detection\*\*\* of nucleic acids of HIV virus by cytometry in relation to)  
 IT Virus, animal  
 (human immunodeficiency, nucleic acid of, \*\*\*detection\*\*\* of, by cytometry, fluorescence probes in)

=> logoff

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LOGOFF? (Y)/N/HOLD:y

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